

Picture Tour of Bean Growth Stages

Saginaw Valley Research and Extension Center
agbioresearch.msu.edu

Images of: **Plowing** · Crop emerges · Growth · Flowering · Bean pods

PLOWING



Ground is fall or spring moldboard or chisel plowed.



Chisel plowing is a reasonable substitute for moldboard plowing, leaving more surface residue and potentially causing less soil compaction.



Ground is leveled in mid May to take out first flush of weeds.



Prior to planting, herbicide is applied and incorporated into the soil to prevent weed growth.



Planting starts the first of June. Beans are planted in rows with a planter, or can be solid seeded with a grain drill.

Fertilizer is either applied with a planter, or is applied broadcast with the herbicide prior to planting.



Image of a bean field following cultivation for weed control

CROP EMERGES



In 5-7 days the crop emerges.



A single unifoliate of leaves is the first to emerge.



Crusting and cracking of the soil is common during the emergence period.

GROWTH



Dry beans are dicots. The seed emerges with the plant.

Under the first unifoliate leaves are the cotyledons.



After the unifoliate leaves emerge, all leaves are trifoliate.



The plant continues to grow up to and through flowering.



A typical bean field.

FLOWERING



At or soon after flowering, canopy closure is reached.



Beans start flowering in mid July.



Bean flower colors are white to purple.

BEAN PODS



Pods form in late July and fill through August.